

AutoDispatch Gateway 2 - Dispatch Integrations: TMA ASAP

12/21/2023 5:09 pm EST

Introduction

TMA ASAP replaces the legacy SOAP via VPN CSAA message broker for ASAP to PSAP, using a REST interface with mutual authentication for communication. (TMA used to be CSAA.) The XML messages are essentially unchanged - they are just communicated via REST. The XML schema can be found at: <http://www.apcointl.com/new/commcenter911/external-alarm.xsd>

Like the legacy broker, TMA ASAP requires two one-way channels for communication, one from Alarm to Dispatch, and one from Dispatch to Alarm. Configuration of these endpoints is controlled through the appsettings.json.

Driver file

The TMA ASAP dispatch driver's file is TmaAsapDispatchProvider.dll.

Configuration file settings

appsettings.json has an object section called "TMAASAP" that contains all configuration for this driver. The default configuration is shown below, and is fully documented in the file.

```

"TMAASAP": {
// The URL of the TMAASAP service
"url": "",
// "url": "",
// The port on which the ASAP response listener will listen.
// Note that the ASAP response route is .../api/asap-message.
"listenPort": 443,
// The thumbprint of the client certificate to use.
// The certificate is provided by TMA and must be placed in the 'Local Computer' store, 'Personal' folder.
"clientCertificateThumbprint": "",
// The thumbprint of the server certificate to use.
// The certificate is provided by TMA and must be placed in the 'Local Computer' store, 'Personal' folder.
"serverCertificateThumbprint": "",
// CSAA Service Provider ID
"providerId": "<NOTSET>",
// When disabled, phone extensions will not be sent.
// Sending extensions is the standard behavior.
"phoneExt": true,
// When disabled, contact phone numbers will be sent without any formatting - i.e. only numeric characters in
phone.
// Sending formatted phone numbers is the standard behavior.
"phoneFormatting": true
}

```

URL

Note the test endpoint vs. the production endpoint. Each Central Station will be required to test their setup with TMA before switching to production use.

ListenPort

This driver will set up a pseudo-IIS server listening on the specified port for messages from TMA. Note that the response route is fixed at /api/asap-message. For example, if we had TMA ASAP set up on sdksupport.boldgroup.solutions, listenPort 33443, TMA would send responses to . The Central Station will have to let TMA know what the appropriate URL is.

Client and Server Certificate Thumbprints

TMA will create their own certificates and give them to the Central Station. Currently, the same certificate applies to

both the client (Central Station -> TMA) and server (TMA -> Central Station), so the thumbprints would be the same. If these are ever split, the configuration allows them to be different. See the certificate section below for complete information about installing the certificate and setting the thumbprints here. This driver's client and server processes use the thumbprint to find the appropriate certificate.

ProviderId

This is the ID (typically 3 characters) provided by TMA to identify the Central Station.

PhoneExt/Formatting

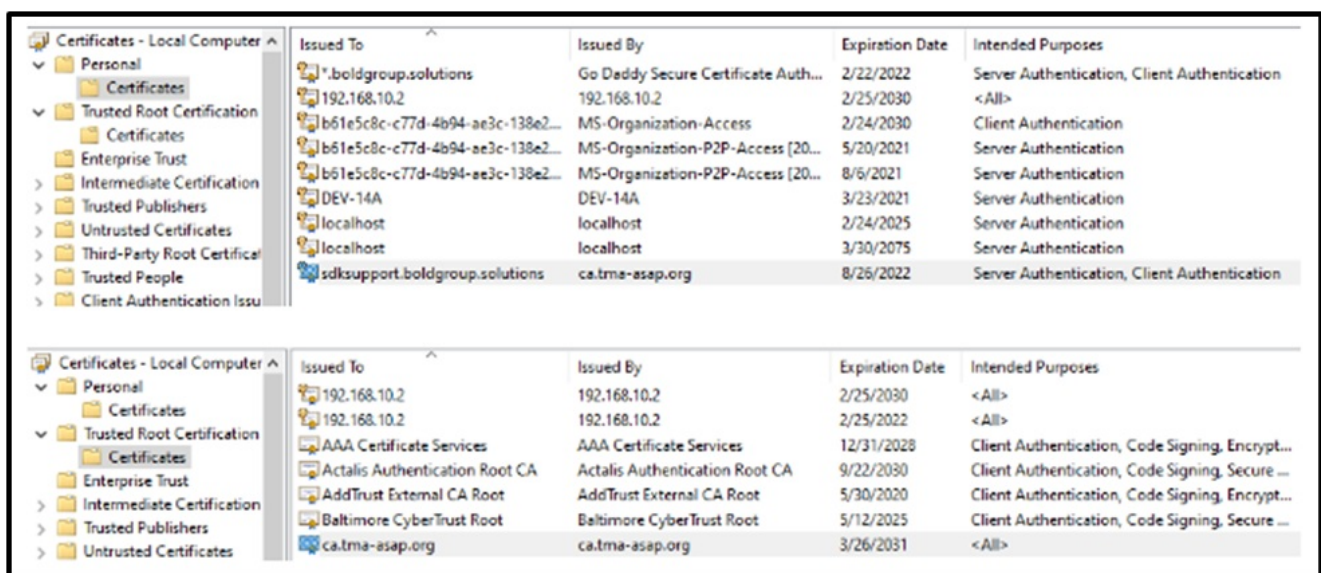
These options should remain the default values unless the standard behavior needs to be overridden.

Certificates

TMA requires mutual authentication in its communications with Central Stations. This means both sides will verify each other before messages are sent. When the Central Station initiates a transaction with TMA, the Central Station client will verify TMA's server certificate and the TMA server will verify the Central Station's client certificate to ensure each side is who they say they are. The same thing happens when TMA initiates a response to the Central Station.

Important! Make sure to open the Server certificate manager (certlm), not the user-based one.

TMA will create and supply the Central Station with the appropriate certificate file. This file must be imported into the Local Computer store Personal location, which will import 2 certificates. After importing, the ca.tma-asap certificate should be moved to the Trusted Root folder. Only the Central Station's certificate must remain in the Personal folder, and only the ca.tma-asap certificate must remain in the Trusted Root folder. Notice that the Central Station's certificate intended purposes covers both server and client authentication.



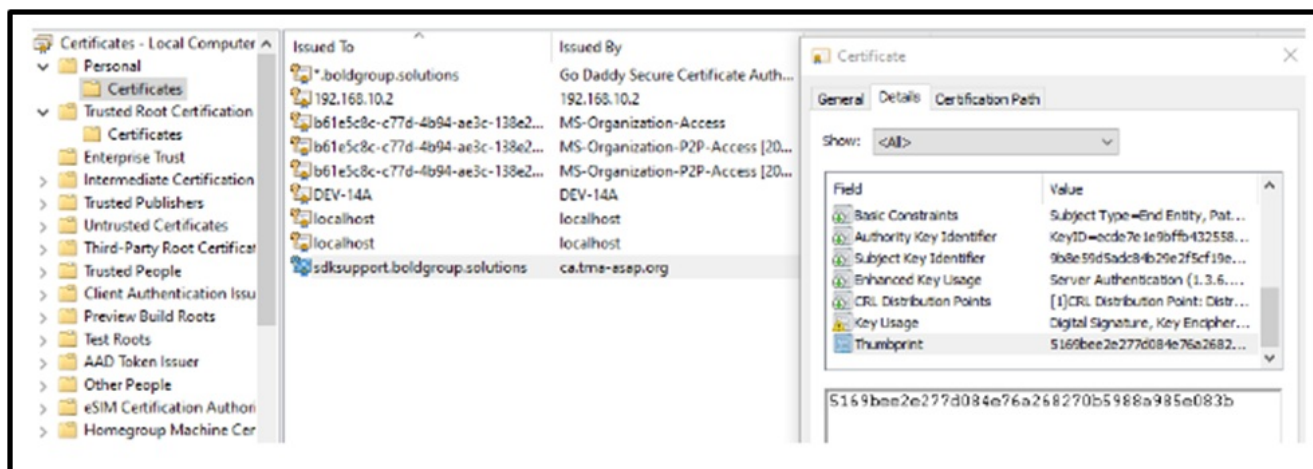
The image displays two screenshots of the Windows Certificate Manager (certlm) interface, showing the 'Certificates - Local Computer' store. The top screenshot shows the 'Personal' folder expanded, displaying a list of certificates. The bottom screenshot shows the 'Trusted Root Certification Authorities' folder expanded, displaying a list of certificates.

Issued To	Issued By	Expiration Date	Intended Purposes
*.boldgroup.solutions	Go Daddy Secure Certificate Auth...	2/22/2022	Server Authentication, Client Authentication
192.168.10.2	192.168.10.2	2/25/2030	<All>
b61e5c8c-c77d-4b94-ae3c-138e2...	MS-Organization-Access	2/24/2030	Client Authentication
b61e5c8c-c77d-4b94-ae3c-138e2...	MS-Organization-P2P-Access [20...	5/20/2021	Server Authentication
b61e5c8c-c77d-4b94-ae3c-138e2...	MS-Organization-P2P-Access [20...	8/6/2021	Server Authentication
DEV-14A	DEV-14A	3/23/2021	Server Authentication
localhost	localhost	2/24/2025	Server Authentication
localhost	localhost	3/30/2075	Server Authentication
sdksupport.boldgroup.solutions	ca.tma-asap.org	8/26/2022	Server Authentication, Client Authentication

Issued To	Issued By	Expiration Date	Intended Purposes
192.168.10.2	192.168.10.2	2/25/2030	<All>
192.168.10.2	192.168.10.2	2/25/2022	<All>
AAA Certificate Services	AAA Certificate Services	12/31/2028	Client Authentication, Code Signing, Encrypt...
Actalis Authentication Root CA	Actalis Authentication Root CA	9/22/2030	Client Authentication, Code Signing, Secure ...
AddTrust External CA Root	AddTrust External CA Root	5/30/2020	Client Authentication, Code Signing, Encrypt...
Baltimore CyberTrust Root	Baltimore CyberTrust Root	5/12/2025	Client Authentication, Code Signing, Secure ...
ca.tma-asap.org	ca.tma-asap.org	3/26/2031	<All>

The thumbprint can be found by opening the Central Station's certificate, going to the Details tab, and scrolling down to

Thumbprint:



This value is then copied to the client and server certificate thumbprints in the configuration file. If the server and client certificates are ever separated, each would have its own thumbprint that would be copied to the appropriate setting in the configuration file.

Reverse Commands

This integration uses the same reverse commands as the legacy integration, except that the parameters are no longer position-based - they are identified by the label. The database migration corresponding to this new integration will add the appropriate labels to all reverse command details of APCO Alarm reverse commands. New reverse command details must have the appropriate labels applied during data entry.

Parameter changes from legacy integration to this one:

1. Service Provider ID (SVID) is now defined in the configuration file, so the parameter is no longer necessary.
2. Service Provider Address (SVAD) is not used by TMA, so the parameter is no longer necessary.

Note that because the parameters are no longer position-based, it is not a problem to include these parameters - they will simply be ignored by TMA ASAP. The database migration will not remove them, maintaining backward compatibility with the legacy integration (existing reverse commands at the time of the database migration could be used with either the legacy integration or this one).

TMA ASAP requires three reverse commands to be configured: ALRM, UPD, and VRFY.

ALRM

Field Type	Data Type	Label	DB Value
Database	Text	CONT	Contact's Name
Database	Text	CPNT	Contact Point
Database	Text	ALID	Alarm Unique Id
Database	Text	CMPY	Monitoring Company Name
Database	Text	OPID	Operator ID
Database	Text	UCBN	CS/User Call-back Number

Database	Text	TIME	Event Time
Database	Text	EVNT	Event Description
Database	Text	EVCD	Event Category Description
Database	Text	PTID	Point ID
Database	Text	ZNTX	Zone Description
Database	Text	Confirmation Text	Confirmed Alarm Text
Database	Text	Call To Premises Text	Call To Premises Text
Database	Text	PRMT	Permit Number
Database	Text	PRMC	Permit Category Description
Database	Text	CUST	Customer Name
Database	Text	CTYP	Customer Type
Database	Text	CROS	Customer Cross Street
Database	Text	SUBD	Customer Subdivision
Database	Text	CPHN	Customer Site Phone
Database	Text	ADDR	Full Address
Database	Text	ADNO	Address Number
Database	Text	ADPR	Address Pre-direction
Database	Text	ADST	Address Street Name
Database	Text	ADTY	Address Street Type
Database	Text	ADPO	Address Post-direction
Database	Text	ADUN	Address Unit
Database	Text	CITY	City Name
Database	Text	REGN	Region Name
Database	Text	POST	Post Code
Database	Text	GPSL	GPS Location
Database	Text	VURL	Video/Image Link
Database	Text	DLID	Dealer ID
Database	Text	DLNM	Dealer Name
Database	Text	DLPH	Dealer Site Phone
Database	Text	COTY	County[Addr3]

UPD

Field Type	Data Type	Label	DB Value
Database	Text	CONT	Contact's Name

Database	Text	CPNT	Contact Point
Database	Text	ALID	Alarm Unique Id
Database	Text	INCD	Authority Incident Number
User Input	Text	Update Comment	

VRFY

Field Type	Data Type	Label	DB Value
Database	Text	CONT	Contact's Name
Database	Text	CPNT	Contact Point
Database	Text	CSER	Customer Serial Number
Database	Text	CUST	Customer Name
Database	Text	ADDR	Full Address
Database	Text	ADNO	Address Number
Database	Text	ADPR	Address Pre-direction
Database	Text	ADST	Address Street Name
Database	Text	ADTY	Address Street Type
Database	Text	ADPO	Address Post-direction
Database	Text	ADUN	Address Unit
Database	Text	CITY	City Name
Database	Text	REGN	Region Name
Database	Text	POST	Post Code
Database	Text	COTY	County[Addr3]
Database	Text	UCBN	CS/User Call-back Number